

WHAT IS CLAIMED IS:

1. A color image forming apparatus in which images  
of a plurality of element colors are sequentially  
5 transferred to form a color image, the color image  
forming apparatus comprising:

control means for giving control data to be used  
for processing control of the image data associated with  
the element color;

10 a plurality of temporary storage means, each being  
provided for each of the element colors and temporarily  
storing control data supplied from the control means in  
an address of its own obtained on the basis of the  
address supplied from the control means;

15 writing selection means which generates, on the  
basis of the address supplied from the control means,  
the selection signal which selects one of the plurality  
of temporary storage means;

image processing means which processes, on the  
20 basis of the control data stored in the plurality of  
temporary storage means, an image data associated with a  
received element color; and

printing means which performs transfer of an  
element color on the basis of the processing result of  
25 the image processing means and gives a color code  
representing an element color which is being subjected  
to transferring.

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2. The image forming apparatus according to claim 1,  
further comprising an additional temporary storage means,  
provided in a manner as to constitute a pair with each  
of the temporary storage means, for causing the  
5 temporary storage means to be a write-enable state,  
wherein a logical sum of a selection signal generated at  
the writing selection means and a signal supplied from  
the additional temporary storage means is calculated so  
as to write, in accordance with the result of the  
10 calculation, the control data supplied from the control  
means.

3. The image forming apparatus according to claim 2,  
further comprising dummy color code storage means for  
15 storing a dummy color code, the dummy color code  
functions as the color code, wherein one of the color  
code supplied from the printing means and the dummy  
color code supplied from the dummy color code storing  
means is switchably supplied to the image processing  
20 means.

4. A color image forming apparatus which forms a  
color image on the basis of a plurality of element  
colors, comprising:  
25 a plurality of temporary storage means which  
temporarily stores control data to be used for  
processing control of the image data associated with  
element colors; and

image processing means for processing, on the basis of the control data, image data associated with a received element color.

5           5. A color image forming apparatus in which images of a plurality of element colors are sequentially transferred to form a color image, the color image forming apparatus comprising:

          a CPU for giving control data to be used for  
10 processing control of the image data associated with the element color and for giving an address;

          a plurality of RAM/register unit each of which is provided for each of the element colors and temporarily stores control data supplied from the CPU in an address  
15 of its own obtained on the basis of the address supplied from the CPU;

          writing selection unit which generates, on the basis of the address supplied from the CPU, the selection signal to select one of the plurality of  
20 RAM/register units, and writes the control data supplied from the CPU in the RAM/register unit which is selected by the selection signal;

          an image processing unit which processes, on the basis of the control data stored in the plurality of  
25 RAM/register unit, an image data associated with a received element color; and

          a printer unit which performs transfer of an element color on the basis of the processing result of

the image processing unit and gives a color code representing an element color which is being subjected to transferring.

5           6. The color image forming apparatus according to claim 5, further comprising an additional register, provided in a manner as to constitute a pair with each of the RAM/register unit, for causing the RAM/register unit to be a write-enable state, wherein a logical sum  
10 of a selection signal generated at the writing selection unit and a signal supplied from the additional register is calculated so as to write, in accordance with the result of the calculation, the control data supplied from the CPU.

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          7. The color image forming apparatus according to claim 6, further comprising a dummy color code register for storing a dummy color code wherein the dummy color  
20 code functions as the color code, wherein one of the color code supplied from the printer unit and the dummy color code supplied from the dummy color code register is supplied to the image processing unit in a switchable manner.

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